



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,667	02/10/2005	George Henry Claridge	JAMES93.001APC	6558
20995	7590	11/21/2006	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			NGUYEN, TUAN N	
2040 MAIN STREET			ART UNIT	
FOURTEENTH FLOOR			PAPER NUMBER	
IRVINE, CA 92614			3751	

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/500,667

Applicant(s)

CLARIDGE, GEORGE HENRY

Examiner

Tuan N. Nguyen

Art Unit

3751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/13/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) is required in this application because the drawing lines are a little messy. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

2. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.
3. The disclosure is objected to because of the following informalities: some of the words has been smeared or missed a letter; therefore, not legible.

Appropriate correction is required.

Claim Objections

4. Claims 1-12 are objected to because of the following informalities: the claims are replete with grammatical error "pressurised" such as in lines 13 and 14 of claim 1, in lines 4, 6 and 8 of claim 3, and in lines 3 and 4 of claim 12. Please also correct this grammatical error in the specification if there is any. Appropriate correction is required.
5. Claims 2-11 and 13 are objected to because of the following informalities: "A" in line 1 of claims 2-11 and 13 should be --The--; "Claim 1" in line 1 of claims 4, 5 and 7-11

Art Unit: 3751

should be --claim 1--; and "mains" in line 2 of claim 4 should be --main--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 5, 6, 8, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Hidetaka (WO 01/73229 A1, which has English copy under US Patent 6,986,172, which is being utilize herewith as an English translation for better understanding).

In regard to claim 1, Hidetaka discloses a toilet (Fig. 1) comprising a toilet bowl (110) having a water outlet (114), a first water supply conduit (160) having at least one outlet (about 166) in the vicinity of an upper region of the toilet bowl, a second water supply conduit (170) having an outlet (about 113a) in a lower region of the bowl, the outlet of the second water supply conduit oriented to direct water passing therethrough towards the water outlet and against a surface of the toilet bowl, a water inlet conduit (150) adapted for connection to a pressurized water supply and to channel water to the first and second water supply conduits, a first flow regulator in the first water supply conduit and a second flow regulator in the second water supply conduit (see Fig. 10), a control device (5) configured to operate the first and second flow regulators to control the flow of pressurized water in the first and second water supply conduits to selectively

Art Unit: 3751

deliver water from the pressurized water supply, a) via the second water supply conduit to create a venturi effect to evacuate waste and water from the toilet bowl; and b) via the first water supply conduit to travel along the wall of the toilet bowl to thereby wash and refill the toilet (see col. 9, line 27+ of 6,986,172).

In regard to claim 2, the diameter of the outlet (about 113a) of the second water supply conduit is less than the diameter of the second water supply conduit (see Fig. 3).

In regard to claim 3, the control device (5) is operably connected to the flow regulators, such that when the control device is activated to flush the toilet, the control device is configured to operate the flow regulator so that: a) water from the pressurized water supply enters the bowl via the first water supply for a predetermined period of time, b) water from the pressurized water supply enters the bowl via the second water supply conduit from the bottom outlet for a predetermined period of time; c) water from the pressurized water supply then re-enters the bowl via the first water supply conduit for a predetermined period of time; and then d) water supply to the bowl is shut off, until the control device is reactivated to flush the toilet (see col. 9, line 27+ of 6,986,172).

In regard to claim 5, the at least one outlet in the vicinity of an upper region of the toilet bowl is/are positioned about the top of the bowl, such that water exiting the outlet or outlets travels around and down the walls of the bowl in a substantially clockwise or anti-clockwise direction (see Fig. 7).

In regard to claim 6, the top outlet or outlets are configured to allow for water to be directed onto the top of the wall of the toilet (see Fig. 7).

Art Unit: 3751

In regard to claim 8, the flow regulators comprise on/off valves (see col. 12, line 45+ of 6,986,172).

In regard to claim 11, the control device (5) is an electronic timing device (see col. 11, line 53+ of 6,986,172).

In regard to claim 12, the method as claimed would be inherent during normal use of the Hidetaka device.

8. Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Hidetaka as evidence by Ge et al. (6,029,287).

Hidetaka discloses the water inlet conduit (150) is adapted for connection to a main water supply having a water pressure from the pressurized water source such as a city water supply pipe (see col. 9, line 30+ of 6,986,172); however Hidetaka remain silent as to the specific value of the pressure. Ge et al. discloses the evidence of a typical main residential water line pressure that may vary from 20 to 80 PSI. Therefore, the at least 30 PSI as claimed is cover by the Hidetaka as evidence by Ge et al.

9. Claims 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Campus (1,998,861).

In regard to claim 12, Campus discloses a method of flushing a toilet comprising the steps of: a) controlling the flow of a pressurized water supply to a toilet bowl, b) delivering the pressurized water supply to the toilet bowl so that the pressurized water: i) creates a venturi effect to evacuate waste and water from the toilet bowl by being directed towards a water outlet of the toilet bowl and against a surface of the toilet bowl (see page 3, right column, line 35+), and ii) travels along the wall of the toilet bowl (see

Art Unit: 3751

Fig. 2) to thereby wash and refill the toilet. In regard to claim 13, the method further comprises the steps of: i) providing water to at least two top outlets (passages 28) for a predetermined period of time, wherein the top outlets are positioned at the top of the toilet bowl to direct water onto the wall of the toilet bowl, ii) providing water to at least one bottom outlet for a predetermined period of time wherein the bottom outlet or outlets is positioned in the base of the toilet bowl and configured to achieve a venturi effect capable of evacuating water and waste from the bowl, (iii) providing water to the at least two top outlets for a predetermined period of time, and (iv) stopping the flow of water to the top outlets to complete the flush cycle once the bowl has been filled to the desired level (see page 4, left column, line 31+).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenichi (JP2000309968).

In regard to claim 1, Kenichi discloses a toilet (Fig. 1) comprising a toilet bowl having a water outlet (about 14), a first water supply conduit (19) having at least one outlet (about 19a) in the vicinity of an upper region of the toilet bowl, a second water supply conduit (18) having an outlet (about 15) in a lower region of the bowl, the outlet of the second water supply conduit is obviously oriented to direct water passing

Art Unit: 3751

therethrough towards the water outlet and against a surface of the toilet bowl (see Fig. 1, the angle of 15 would obviously hit along the bowl surface where 14 is pointing), a water inlet conduit (21) adapted for connection to a pressurized water supply and to channel water to the first and second water supply conduits, a first flow regulator (4R) in the first water supply conduit and a second flow regulator (4J) in the second water supply conduit (see Fig. 8), a control device (about 7) configured to operate the first and second flow regulators to control the flow of pressurized water in the first and second water supply conduits to selectively deliver water from the pressurized water supply, a) via the second water supply conduit to create a venturi effect to evacuate waste and water from the toilet bowl; and b) via the first water supply conduit to travel along the wall of the toilet bowl to thereby wash and refill the toilet.

In regard to claim 7, the water exiting the outlet of the second water supply conduit does so through a tapered end portion (it tapered because the outlet diameter of nozzle 15 is smaller than that of the conduit 18), which obviously increases the velocity of the water and directs it towards the water outlet of the toilet bowl at a point on the wall of the toilet bowl (about where 14 is pointing) above the outlet of the water supply conduit. Although the Kenichi reference remains silent as to the specific of the point on the wall of the toilet bowl where the water directed is approximately 5 centimeters above the outlet of the water supply conduit. It would have been obvious to one of ordinary skill in the art at the time the invention was made to direct the water outlet of Kenichi at a point on the wall of the toilet bowl approximately 5 centimeters above the outlet of the water supply conduit, since it has been held that where the general conditions of a claim are

Art Unit: 3751

disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

12. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidetaka, as discussed above, in view of Saar et al. (6,560,790).

The flow regulators of Hidetaka comprises a pilot valve having an inlet and two outlets (23,24) wherein the valve is configured for directing water to either the first or second water supply conduits and shutting off the water supply to both water supply conduits. Although the Hidetaka reference remains silent as to the valve being a solenoid valve, attention is directed to the Saar et al. reference, which discloses a flush control having a solenoid pilot valve (58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ, on the Hidetaka device, a solenoid pilot valve (if not already) as, for example, taught by Saar et al. in order to electrically control the pilot valve. To provide two flow regulators in the form of separate solenoid valves each having an inlet and an outlet as claimed in claim 10 would also have been obvious in view of Saar et al.

Conclusion


13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nakamura et.al. and Ragot discloses other venturi toilets.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan N. Nguyen whose telephone number is 571-272-4892. The examiner can normally be reached on Monday-Friday (10:00-6:00).

Art Unit: 3751

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tuan Nguyen
Primary Examiner
Art Unit 3751

TN